

Sample Evaluation Plan

Best Evaluators, Inc. (BEI)

Best Prevention Program Ever, Inc. (BPPE) Evaluation Plan

STUDY DESIGN

Process Evaluation

The evaluation will address four process issues: (1) What were the goals and objectives of the project, and what activities were planned to accomplish them? (2) Was the project actually carried out as planned? (3) If not, what changes were made in the project design and for what reasons? (4) What implementation problems, if any, were encountered and how were they addressed? The process evaluation will generate narrative and quantitative descriptions of project activities. Process evaluation data will be collected by BPPE staff and submitted to BEI. See Table 1 for a detailed list of process evaluation information to be collected.

Outcome Evaluation

Science Fair Mentoring Component

In order to determine whether and how the project improves mentee performance, we will administer pre-test and post-test questionnaires to all 7th and 8th grade mentees in Year One, Year Two, and Year Three. Given that mentees are both selected and self-selected, we will not use a comparison group of non-mentees. The instruments will collect information about improvement on dimensions such as: knowledge of science and the scientific method; attitudes toward science; attitudes toward learning in general; behavioral intentions regarding science; improved relationship with adults; and self-confidence. Data will also include: overall satisfaction with the Science Fair Mentoring program and its features; things they liked best and least about the program; and characteristics of mentees that may be associated with outcomes. The analyses will depend on the metric and distribution of the variables and on the number of cases. We expect, however, that the main statistical procedure will be paired t-tests on pre-test to post-test scores. Secondary analyses (t-tests, Chi-squares, etc.) will examine gains made as a function of other variables (e.g., gender, prior experience, and level of academic achievement).

Data about longer-term outcomes will be collected by follow-up questionnaires mailed to the first year (cohort) of 7th and 8th grade mentees when (in Year four of the project) they will be in the 10th and 11th grades, respectively. Items will ask respondents to report the extent to which their experience in the project contributed to their current performance and interest in science (e.g., participation in higher level science courses and/or in science-related extracurricular activities, plans to study science in college). BEI will send repeat mailings to non-responders, offer incentives to all participants, and use other established methods to increase response rates.

Corroborating data about student outcomes will be collected through post-program questionnaires administered to all teachers and mentors. Teacher questionnaire data will be collected using the same instrument that will be designed to assess the impact of professional development activities (see description below), and will be administered in Year One, Year Two, and Year Three. Mentor questionnaire data will be collected using a posttest instrument designed and implemented in Year One. This will provide mentor data on the longitudinal cohort of mentees that we will be following-up with in Year Four.

Additional corroborating data will be collected from records provided by BPPE staff to BEI. See Table 1 for a detailed list of additional information to be provided (e.g., the number and percent of mentees who submit projects to the School and the City Science Fairs as compared with non-mentees at the same school(s) and with students in other schools). Mentee questionnaires will be administered and collected by BPPE staff and returned to BEI. Teacher questionnaires will be distributed by BPPE staff and returned to BEI by teachers using stamped, addressed envelopes provided by BEI. Mentor questionnaires will be distributed by BPPE staff and returned to BEI by mentors using stamped, addressed envelopes provided by BEI.

Teachers' Professional Development and Science in the Classroom

The post-program questionnaires used to corroborate mentee data will also be used to assess the impact of the program on teachers' own professional development. Teachers will be asked to report the impact of the Science Fair Mentoring program, Science in the Classroom, and related program efforts (e.g., new curriculum materials) on their capacity to teach science, mentor colleagues, and co-teach. Teachers will also be asked about their satisfaction with the program and its features, and recommendations for changes in the program.

To ascertain the effectiveness of science training, BEI will also assess the fidelity with which teachers implement targeted curricula. These data will be collected by BEI staff through direct observations of one lesson by each teacher. Teacher observations will be conducted in Years One, Two, and Three.

Science Family Activity Nights

All adult participants in each SciFAN in Years Two and Three will be asked to complete a brief questionnaire to assess change in their understanding of the topic of the event, their understanding/awareness of resources to help their child with science, their understanding of science in their lives, their confidence in their ability to help their child with science, their opinions about the school, and their willingness to attend other types of school events. The questionnaire will include items to assess their satisfaction with the event, any changes they might recommend, and their willingness to recommend it to other parents. The questionnaire will identify those who participated in previous SciFANs (which itself indicates positive impact) and ask them to assess the impact on their behaviors (e.g., increased time spent discussing science with their child). Parent questionnaires will be administered and collected by BPPE staff and returned to BEI.

PROJECT MEETINGS

BEI staff will attend two face-to-face meetings with BPPE project staff per year.

REPORTING

Results will be reported as they become available to allow program staff to adjust the project if needed. Reports prepared at year end will discuss the evaluation objectives, methods, findings, and their implications. A report of results for all four years of the project will be completed in Year 4. Reports will include executive summaries, graphical displays, and other features to promote widespread consideration of the findings.

Table 1: Data Collection Activities

	Year One	Year Two	Year Three	Year Four
Science Fair Mentoring Component				
Mentee Pretest Survey	X	X	X	
Mentee Posttest Survey	X	X	X	
Mentee Alumni Survey				X
Mentor Posttest Survey	X			
Professional Development and Science In the Classroom				
Teacher Posttest Survey	X	X	X	
Teacher Fidelity Observations	X	X	X	
Science Family Activity Nights				
Parent Posttest Survey		X	X	
Reporting				
Yearly Report	X	X	X	
Final Report				X
Process Evaluation Data				
Mentees entering the program each year	X	X	X	X
Mentees who complete the program each year (of those who started)	X	X	X	X
7 th graders who continue in the program in their 8 th grade year	X	X	X	X
Mentors entering the program each year	X	X	X	X
Mentors who complete the program each year (of those who started)	X	X	X	X
Mentors who participate in the program for multiple years	X	X	X	X
Attendance at meetings with mentors	X	X	X	X
Mentees who submit projects to the School and the City Science Fair as compared with non-mentees and with students in other schools	X	X	X	X
Mentees who win prizes in the School and City Science Fair as compared with non-mentees and with students in other schools	X	X	X	X
Number of participants at Science Family Activity Nights	X	X	X	X
Teacher professional development data (to be determined in collaboration with BPPE staff)	X	X	X	X